



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In re United States Patent Application of:**

**Applicants: GRADY, Jeff**

**Application No.: 10/780,329**

**Date Filed: February 17, 2004**

**Title: AUDIO PLAYER ASSEMBLY  
COMPRISING AN MP3  
PLAYER**

**Docket No.: 4185-101-CIP2**

**Conf. No.: 1103**

**Art Unit: 2618**

**Examiner: Nguyen Thanh Vo**

**Customer No.:**

**23448**

**DECLARATION OF WAYNE A. CALCO UNDER 37 C.F.R. § 1.132 IN  
U.S. PATENT APPLICATION NO. 10/780,329**

1. My name is Wayne A. Calco. I have a Bachelor of Fine Arts Degree, with a major of Industrial Design, from the Cleveland Institute of Art in Cleveland, Ohio.
2. I am a Principal and the Design Director of Bubble Design, an award-winning product development company based in Mountain View, California responsible for designing numerous best-selling consumer and industrial products over the past 19 years. Well-known clients of Bubble Design include Hewlett-Packard Optoelectronics, Disney Consumer Products, Sega of America, Digital Lifestyle Outfitters, Kensington, Inc., Mattel Toys, Inc., and IDEX Corporation. I have been employed continuously by Bubble Design since 1988. At Bubble Design, I am primarily engaged in product design, and have particular expertise in designing consumer electronic products.
3. I am named as an inventor or co-inventor on numerous domestic and foreign patents and published patent applications, including:
  - U.S. Design Patent Application No. 29/255,898 (entitled "Remote Controlled Docking Assembly for Media Device");
  - European Community Design Registration No. 000561428-001 (entitled "Multi-Function Protective Assembly for Portable Digital Media Storage and Playback Device");

- U.S. Design Patent Application No. 29/252,488 (entitled “Multi-Function Protective Assembly for Portable Digital Media Storage and Playback Device”);
- U.S. Design Patent No. D352,280 (entitled “Computer Keyboard”);
- U.S. Utility Patent Application Publication No. 2007/0027418 (entitled “Cervical collar with geared adjustment”)
- U.S. Design Patent No. D489,741 (entitled “Apparatus for melting thermoplastic material”);
- U.S. Utility Patent No. 6,527,608 (entitled “Throwing disc with changeable aerodynamic characteristics”);
- U.S. Design Patent No. D466,244 (entitled “Luminaire”);
- U.S. Utility Patent No. 4,648,658 (entitled “Collapsible chair”); and
- European Patent No. 0202104 (entitled “Folding furniture”).

4. I have received numerous design awards, including, for example: ID Magazine Design Distinction Award, Architectural Design Excellence (ADEX) Award, Johns Hopkins University National Design Award, National Parents’ Choice Award, United Kingdom Game of the Year Award, and Timex National Design Award.

5. I have designed or meaningfully contributed to the design of numerous accessories for use with portable digital media players (e.g., the Apple iPod), including the following products:

- iBoom Travel™ alarm clock radio and portable speaker system (for Apple iPod), sold by Digital Lifestyle Outfitters or “DLO” (see [http://www.dlo.com/Products/iBoom\\_travel\\_comb\\_Prod.tpl](http://www.dlo.com/Products/iBoom_travel_comb_Prod.tpl));
- HomeDock® and HomeDock Deluxe™ home entertainment docking stations (for Apple iPod and Microsoft Zune players), sold by Digital Lifestyle Outfitters or “DLO” (see: [http://www.dlo.com/products/homedoc\\_Prod.tpl](http://www.dlo.com/products/homedoc_Prod.tpl) and [http://www.dlo.com/products/homedoc\\_dx\\_Prod.tpl](http://www.dlo.com/products/homedoc_dx_Prod.tpl));
- “nanoTune” FM transmitter / FM radio / headphone amplifier (for Apple iPod nano), sold by Digital Lifestyle Outfitters or “DLO” (see: [http://www.dlo.com/Products/nanotune\\_Prod.tpl](http://www.dlo.com/Products/nanotune_Prod.tpl));
- “mini fm” FM radio receiver and headphone amplifier (for Apple iPod mini) sold by Digital Lifestyle Outfitters or “DLO” (see: [http://www.dlo.com/Products/miniFM\\_Prod.tpl](http://www.dlo.com/Products/miniFM_Prod.tpl))

- iTalk® microphone accessory for iPod, sold by Griffin Technology, Inc. (see <http://www.griffintechology.com/products/italkpro/>);
- iFire™ adapter for Apple Pro stereo speakers, sold by Griffin Technology, Inc. (see <http://www.griffintechology.com/support/ifire/index.php>);
- iFM™ radio receiver and remote controller for iPod, sold by Griffin Technology, Inc. (see <http://www.griffintechology.com/products/ifmdock/>); and
- Habitat™ and SecureHabitat™ stands for iPod, sold by Bubble Design (see <http://bubbledesign.com/html/habitat.html>).

6. I have further designed various other consumer electronic devices, including:

- ZVUE model 250 portable video music and photo player, sold by Handheld Entertainment, Inc. (see [http://www.zvue.com/players/players.php?thispage=players\\_250\\_features.php](http://www.zvue.com/players/players.php?thispage=players_250_features.php));
- Broderbund Software “UForce” interactive infrared electronic video game controller for Nintendo Entertainment system (see <http://en.wikipedia.org/wiki/Image:Uforce1.jpg>) ;
- Interactive video camera for electronic video game console, designed for Electric Planet; and
- Handheld video game console for Sega Electronics.

7. I have been a long-standing enthusiast of consumer electronic devices, especially including various Apple iPod devices. I own at least twenty (20) Apple iPod devices, and believe that I own one example of every iPod model variant since inception of the brand by Apple Computer. I own a vast number of accessories for iPods. With regard to speaker docking products in particular, I currently own an Apple iPod HiFi speaker dock. I own an Apple iPhone and use it daily. I own and use an Apple iTV video streaming unit. I own and use a BlueRay high definition video disc player, coupled to a high definition LCD television. I am an avid video gamer and have owned and used various video game consoles over the years; I currently own and use a Sony PS3 video game console. I own and use multiple Bluetooth wireless accessories. I have owned a vast number of different mobile telephones over the past twenty years. I am a member of the Stanford University (Apple) Newton user’s group. I have been an official developer of accessories for PALM devices (e.g., the PalmPilot).

8. Consistent with my profession as a product designer and an enthusiast of consumer electronic devices, I keep myself well-informed regarding new products and new product designs in the consumer electronic device space. I regularly attend the annual Consumer Electronics Show in Las Vegas, Nevada and the annual MacWorld Convention, and have done so for a period of years. I subscribe to and regularly read a daily email update called the "CEA Smart Brief" by CE Vision Magazine, which is the official publication of the Consumer Electronics Association.

9. Based on my education and experience as a designer of consumer electronic devices, my hobby as an enthusiast of consumer electronic devices, and my practice of staying well-informed regarding new consumer electronic products and product designs, I consider myself to have substantial expertise in the design and use of consumer electronic devices. At a minimum, I consider myself to possess a level of ordinary skill in the art in human interfaces for consumer electronic devices, sufficient for me to offer testimony helpful to assess and interpret the disclosure of U.S. Patent Application No. 10/780,329 and how it would be perceived by one of ordinary skill in the art.

10. I have reviewed numerous documents relating to U.S. Patent Application No. 10/780,329, including:

- the detailed description, claims, and drawings of the application as originally filed;
- the drawing objections stated in the (second) Office Action issued by the USPTO on November 15 2006;
- the Response to (second) Office Action filed by the Applicant on December 4, 2006;
- the Advisory Action issued by the USPTO on January 11, 2007;
- the Response to Advisory Action filed by the Applicant on February 12, 2007;
- the Advisory Action issued by the USPTO on March 19, 2007;
- the Response to Advisory Action filed by the Applicant on April 24, 2007;
- the Second Declaration of Jeff Grady filed by the Applicant on April 24, 2007; and
- the (fifth) Office Action issued by the USPTO on July 13, 2007.

I note that the (fifth) Office Action dated July 13, 2007 includes the following excerpt:

3. The amendment filed 4/24/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The newly-added limitation "Further provided are control elements 17A, 17B, of which one control element may be employed for frequency tuning control" contains new matter. The original specification does not disclose that one of the raised cylindrical knobs (now labeled 17A and 17B) is for frequency tuning control. In addition, the original specification discloses that the frequency tuning control element is located in the modular docking unit (see original claim 13). Since the raised cylindrical knobs (now labeled 17A and 17B) are located outside of the modular docking unit (see figure 1), they are clearly not for the frequency tuning control.

Based on my review of the foregoing documents, I have the following comments regarding the new matter objections under 35 U.S.C. 132(a) stated in the (fifth) Office Action dated July 13, 2007.

11. U.S. Patent Application No. 10/780,329 was filed with three drawings, as copied in Exhibit A hereof. Each figure shows an audio player assembly, configured as a boombox with two speakers, configured to receive and operate with a portable digital media storage and playback device (e.g., an iPod® portable digital media storage and playback device). The audio player assembly illustrated in Figures 1-3 includes two raised cylindrical knobs positioned along the front of the player assembly. The raised cylindrical knobs are placed within direct view and easy grasp a user of the audio player assembly. The approximate size of each raised cylindrical knob may be inferred by comparison and reference to the iPod device illustrated as docked with the audio player assembly. The size, shape, and placement of each raised cylindrical knob are consistent with the use of such cylindrical knob as a control element to be grasped and operated by a user. The figures illustrate a "modular docking unit 16" having defined therein a docking cavity for docking a MP3 player 18. Each raised cylindrical knob is disposed outside the modular docking unit 16. The foregoing facts would be apparent to one of ordinary skill in the art upon review of the drawings and written description of U.S. Patent Application No. 10/780,329.

12. The original text of U.S. Patent Application No. 10/780,329 discloses a “frequency tuning control,” for example, at page 4, the second full paragraph, and at page 11 (i.e., within original claim 13), specifically referring to a “frequency tuning control.” The second full paragraph of page 4 of the application is reproduced below:

Such modular docking unit may comprise various functional elements, including but not limited (a) means for retaining the MP3 player in position in the docking cavity; (2) coupling means for connection with an audio out port of the MP3 player, for receiving the audio signal therefrom; (3) amplifier for amplifying the received audio signal before such signal is outputted by the speaker; (4) power/charging circuitry for charging the MP3 player docked therein; (5) indicator lights for indicating the operational state of such unit (e.g., “charged” indicating that the unit is charging the battery of an MP3 player docked therein); (6) frequency tuning control and/or frequency indicator, etc.

(Emphasis added.) Moreover, original claim 13, as depending from original claim 2, which depended from original claim 1, is reproduced below with original claims 1 and 2 for context:

1. An audio player assembly comprising:
  - (a) an MP3 player; and
  - (b) an audio player unit comprising at least one speaker and optionally an FM receiver operatively coupled with the speaker, wherein said audio player unit is operatively connected with the MP3 player for receiving an audio signal produced by the MP3 player and for outputting said audio signal through the at least one speaker thereof.
2. The audio player assembly of claim 1, wherein said audio player unit comprises an [*sic*, a] modular docking unit having a main body portion with a docking cavity therein for docking said MP3 player.

\* \* \*

13. The audio player assembly of claim 2, wherein the modular docking unit comprises a frequency tuning control on the main body portion.

(Application, pages 10-11.)

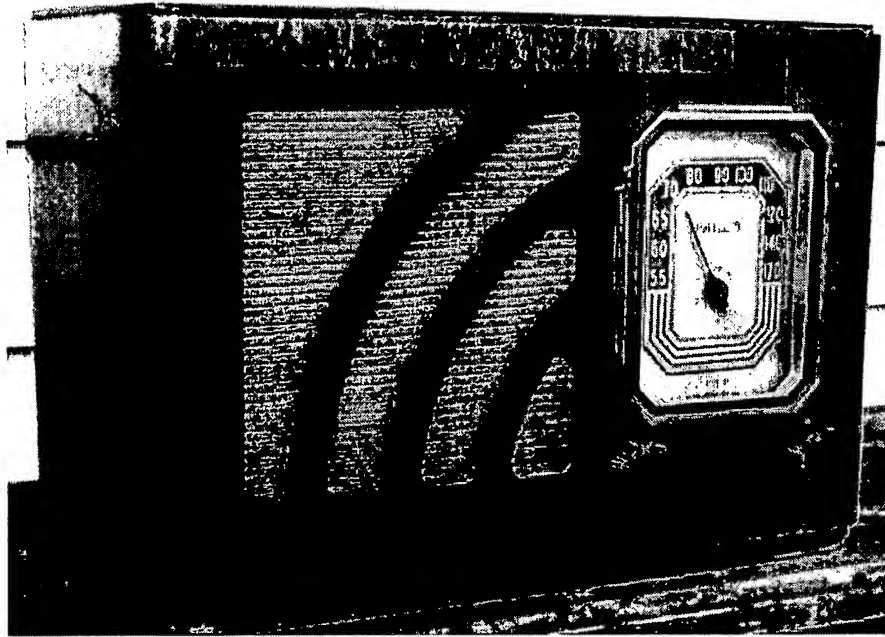
13. The second full paragraph at page 4 of the present application uses the optional term “may” in describing that a “modular docking unit may comprise ... [a] frequency tuning control.” Based on the use of the phrase “may comprise” in this context (which signifies “might comprise” or “could comprise”), one of ordinary skill in the art at the time the invention was made would understand that a frequency tuning control need not necessarily be incorporated into

a modular docking unit. Such idea is reinforced by illustration of raised cylindrical knobs (which would be immediately recognizable by one skilled in the art as control elements) outside of the modular docking unit in each of drawing figures 1-3 as originally filed. Therefore, upon review of the original written description in combination with the originally-filed drawings, one of ordinary skill in the art at the time the present invention was made would readily understand that control elements could be placed outside the modular docking unit – as such possibility was illustrated in the original drawings. Moreover, since the only control functions specifically described in the written description relate to frequency tuning control (e.g., at page 4, second full paragraph), one of ordinary skill in the art at the time the invention was made would understand that one of the raised cylindrical knobs or control elements illustrated outside the modular docking unit in figures 1-3 could and would be used for the function of frequency tuning control.

14. I have been advised that a dependent patent claim defines a possible subset of an independent patent claim, such that for purposes of interpreting an independent claim, the limitations of a dependent claim depending therefrom may be considered to be optional features. In U.S. Patent Application No. 10/780,329, original claim 13 was presented as a dependent claim, thus representing a subset of features that *could or might be*, embodied in independent claim 1, in combination with the features of intervening claim 2). Upon review of the entire original application, including the drawings that illustrate raised cylindrical knobs consistent with control elements disposed outside of the modular docking unit, one of ordinary skill in the art at the time the invention was made would understand that original claim 13 discloses one possible location of the “frequency tuning control” (i.e., on the modular docking unit), and that the drawings disclose another possible location of a frequency tuning control (i.e., outside a modular docking unit). To my understanding, the presence of original dependent claim 13 does not foreclose the possibility that a frequency tuning control (e.g., as embodied in one of the raised cylindrical knobs illustrated in Figures 1-3) may be disposed outside of the modular docking unit 16.

15. The use of two knobs to control a radio, typically with the left knob controlling on/off and volume, and with the right knob controlling frequency tuning, was widely adopted for decades, prior to the advent of electronic control systems. Such configuration was nearly universal in control of car radios. A user would typically turn on the radio by turning the left knob in a clockwise direction from an “off” position, with further turning of the knob in a clockwise being used to increase volume (and movement in a counterclockwise directly to reduce

volume or ultimately turn the radio off). Furthermore, a user would adjust radio tuning frequency by selectively turning the right knob, with clockwise movement used to increase radio frequency and counterclockwise movement used to decrease radio frequency. A first example of this classic dual knob radio control design is embodied in the Philco 38-12 radio, circa 1938, as pictured below:



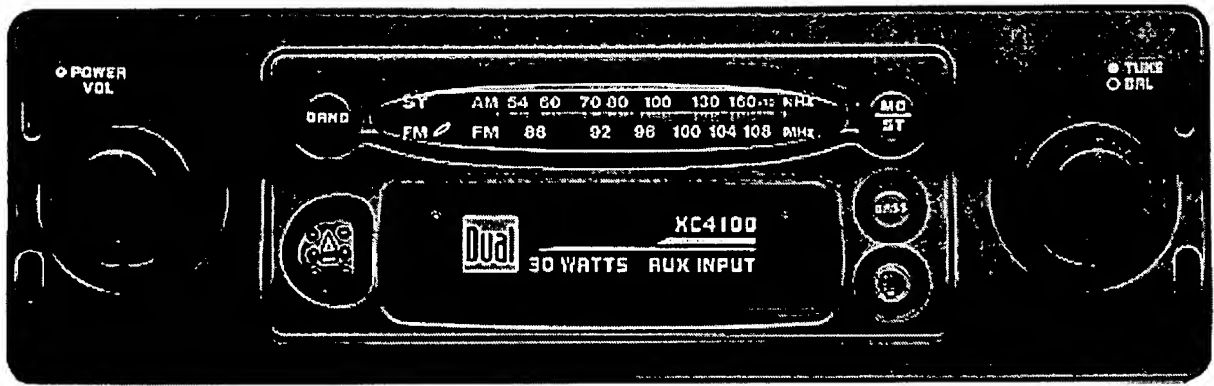
A second example of this classic dual knob radio control design is embodied in the following photo of various car radios:





(Source: [http://www.oldclassicar.co.uk/old\\_car\\_radios.htm](http://www.oldclassicar.co.uk/old_car_radios.htm) )

Similar dual knob control designs persist to this day, even after the advent of digital control components and displays. For example, the following Dual XC4100 car stereo is currently for sale (August 2007) at [www.crutchfield.com](http://www.crutchfield.com).



(Source: <http://www.crutchfield.com/S-WNtyQMVy48H/cgi-bin/ProdView.asp?g=300&tab=morephotos&pi=1&i=070XC4100&display=L#Tab.>)

Note that in the unaltered photo copied above, the left knob is labeled with “POWER VOL” and the right knob is labeled with “TUNE.” An outer right knob further provides BAL (balance) control utility.

16. Given the long history and commonality of “dual knob” radio controls including one knob for volume control and the other knob for tuning control, one of ordinary skill in the art at the time the invention was made would construe the two cylindrical knobs illustrated in Figures 1-3 and described in the text of U.S. Patent Application No. 10/780,329 as embodying (1) a volume control knob, and (2) a frequency tuning control knob, with one knob dedicated for each function.

17. In the (fifth) Office Action dated July 13, 2007, the Examiner states:

Applicant argues that the amendment to the specification filed 4/24/2007 which includes the newly-added limitation "Further provided are control elements 17A, 17B, of which one control element may be employed for frequency tuning control" does not contain new matter, because (i) the frequency tuning control does not have to be included in the modular unit (the specification states "such modular unit may comprises ... frequency tuning control and/or frequency indicator, etc."), and (ii) the only control elements expressly described in the written disclosure related to frequency tuning control.

The examiner agrees with applicant that the frequency tuning control does not have to be included in the modular unit. However, the examiner takes position that one of the control elements 17A and 17B does not have to be the frequency tuning control as alleged by applicant for the following reasons.

The specification on page 4 discloses that:

"Such modular docking unit may comprise various functional elements, including but not limited (a) means for retaining the MP3 player in position in the docking cavity; (2) coupling means for connection with an audio out port of the MP3 player, for receiving the audio signal therefrom; (3) amplifier for amplifying the received audio signal before such signal is outputted by the speaker; (4) power/charging circuitry for charging the MP3 player docked therein; (5) indicator lights for indicating the operational state of such unit (e.g., "charged" indicating that the unit is charging the battery of an MP3 player docketed therein); (6) frequency tuning control and/or frequency indicator, etc." (emphasis added by examiner).

Therefore, the specification clearly states that other control elements may be used beside the frequency tuning control. In addition, applicant also admits that other control elements such as volume control could be used. See page 4 of applicant's Declaration which states that "I further contemplated that the two raised cylindrical knobs disclosed in the figures were control elements, with one being used for frequency tuning control and the other used for volume control".

Since volume control could also be used, the two raised cylindrical knobs may be used for volume control purpose, wherein a first knob is used for controlling volume of the right speaker, and a second knob for the left speaker. **For that reason, one of the control elements 17A and 17B does not have to be the frequency tuning control as alleged by applicant.**

For the foregoing reasons, the examiner contends that the amendment to the specification filed 4/24/2007 which includes the newly-added limitation "Further provided are control elements 17A, 17B, of which one control element may be employed for frequency tuning control" contains new matter.

(July 13, 2007 Office Action, pages 10-11.)

18. I disagree with several conclusions made by the Examiner in the foregoing passage. The Examiner alleges that "the two raised cylindrical knobs may be used for volume control purposes, wherein a first knob is used for controlling volume of the right speaker, and a second knob for the left speaker." (July 13, 2007 Office Action, page 11.). I suggest that the Examiner's interpretation of the disclosure of U.S. Patent Application No. 10.780,329 is erroneous for failing to comprehend the context of the application as it would be perceived by one of ordinary skill in the art. First of all, in my many years of studying product design and in engaging in design of consumer electronic devices, I have never witnessed or heard of a boombox radio with two prominent knobs, where one knob is used for controlling volume of a left speaker and another knob is used for controlling volume of a right speaker. Second, the examiner ignores the long history of "dual knob" radio controls as discussed hereinabove, in which a first knob (typically the left knob) is used for volume control, and a second knob (typically the right knob) is used for frequency tuning control. Third, in a boombox lacking

detachable speakers, as apparent from the integrated speaker design illustrated in U.S. Patent Application No. 10/780,329, the relatively close permanent placement of the two speakers leaves little reason to provide independent first and second speaker volume controls. Based on all of these reasons, one of ordinary skill in the art *would not possibly* interpret the cylindrical control knobs of U.S. Patent Application No. 10/780,329 to embody a left speaker volume control knob and a right speaker volume control knob as proposed by the Examiner.

19. Based on my education and experience pertaining to human interfaces for consumer electronic devices, my understanding of the history of dual knob radio controls, and my review of U.S. Patent Application No. 10/780,329, the overwhelmingly most plausible interpretation of the left and right cylindrical control knobs of such application to one of ordinary skill in the art at the time the invention was made is that one knob would be used for frequency tuning control, and the other would be used to control volume of both speakers of the illustrated audio player assembly.

20. I was an early adopter of Apple iPod devices, and have been keenly aware of accessories for iPod devices as they have been released to the consumer market. I am not aware of any product embodying the subject matter of the instant U.S. Patent Application No. 10/780,329 that was publicly available prior to the filing of the instant application or the release of the earliest DLO IBOOM boombox product having iPod docking capability. Based on my keen interest in consumer electronic devices generally, and more specifically in iPod devices and accessories relating thereto, I believe that I would have quickly become aware of any antedating product embodying the subject matter of the instant patent application, had such an antedating product existed. I remember the introduction of DLO's IBOOM boombox. To my understanding, DLO was correct in its characterization of the product as being the first boombox having iPod docking capability. Following DLO's release of the IBOOM boombox, I am aware of the introduction to the U.S. consumer market of a large number of competing products embodying the subject matter of the instant patent application.

I declare under penalty of perjury that the facts set forth in this declaration are true and correct, that all statements made of my own knowledge are true, and that all statements made on information and belief are believed to be true. I have been hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18

U.S.C. § 1001, and that such willful false statements may jeopardize the validity of the application or any resulting patent.

Executed at Laguna Beach, California, this 5<sup>th</sup> day of October, 2007.

  
Wayne A. Calco  
Principal and Design Director  
Bubble Design.

Enclosure:  
Appendix A (copy of original drawing figures 1-3)

# **EXHIBIT A**

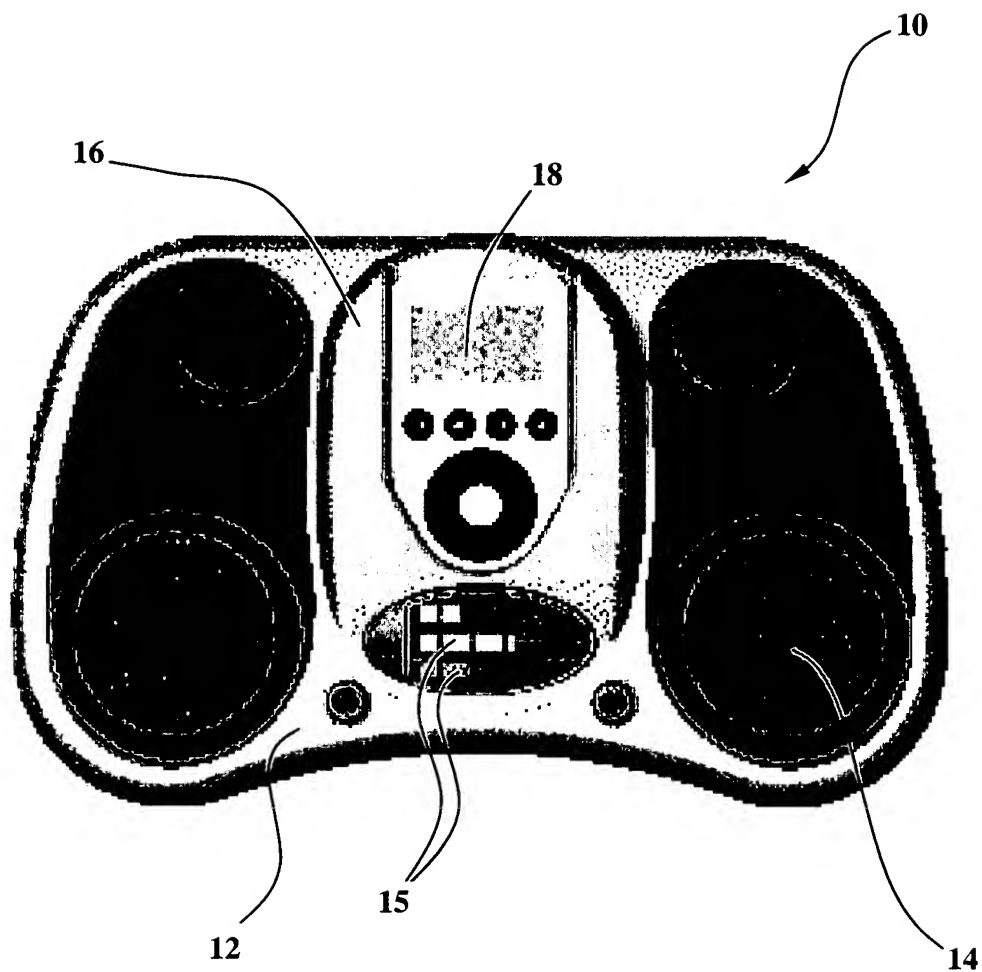
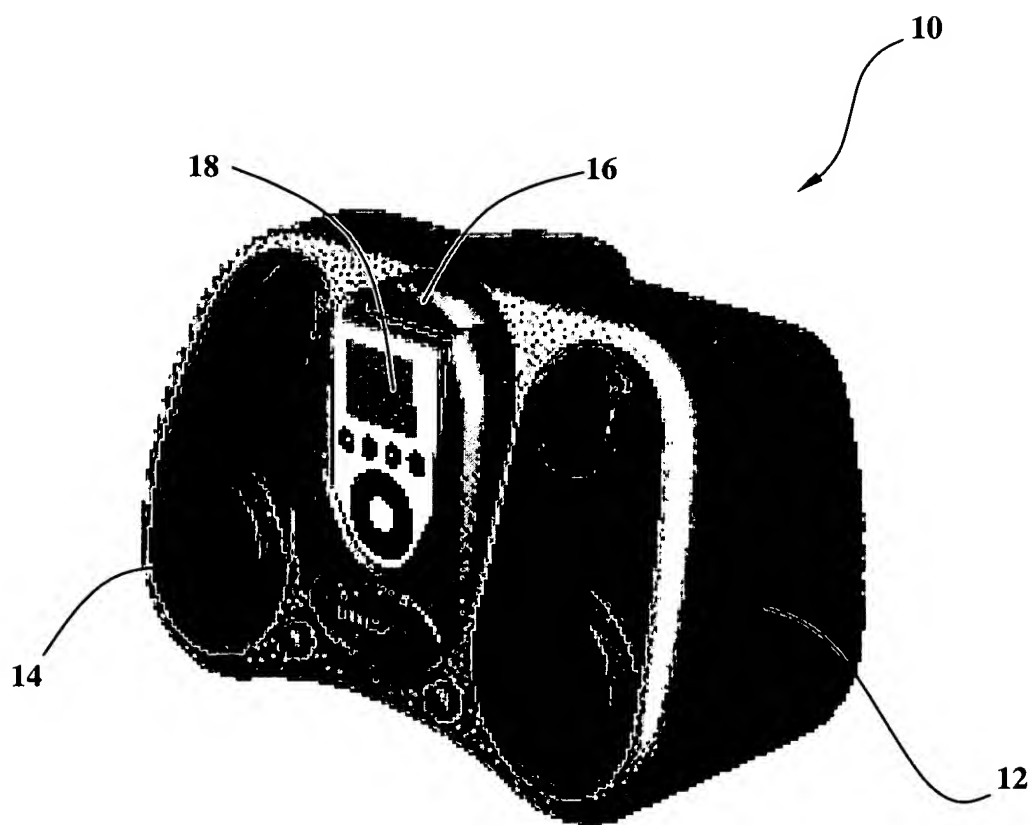
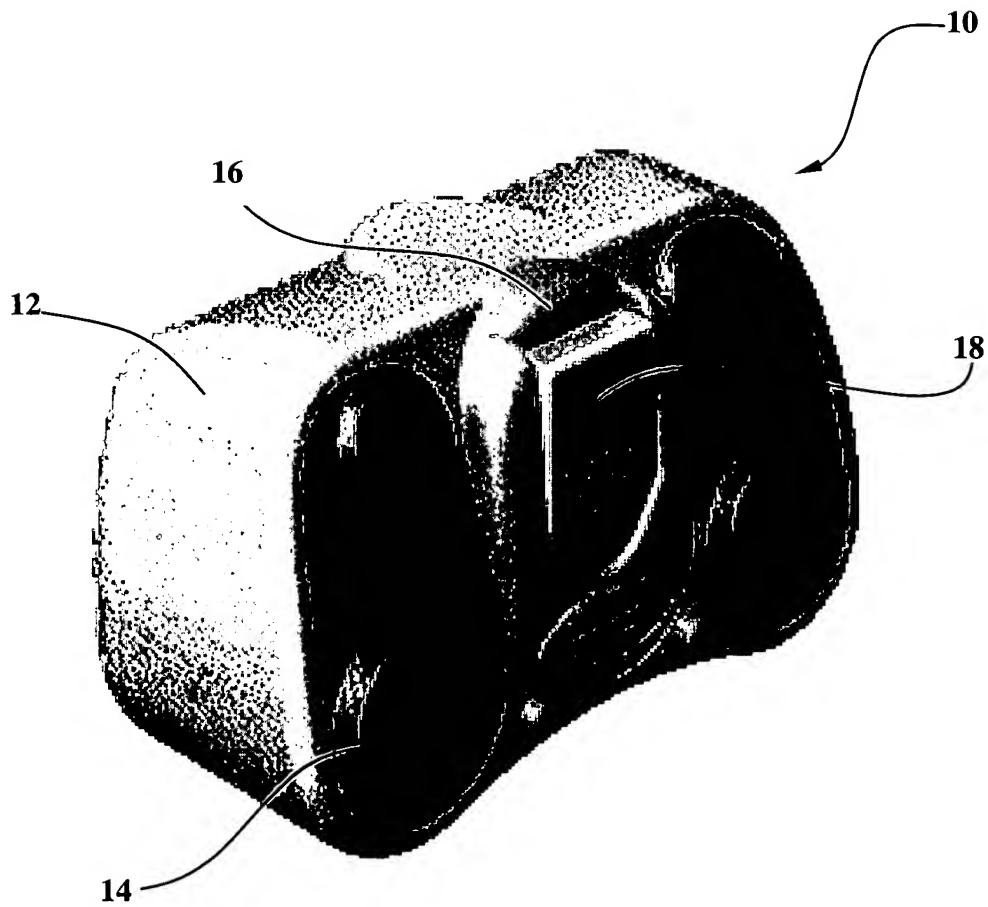


Figure 1





**Figure 2**



**Figure 3**